

AMENDMENTS TO THE CLAIMS

Listing of claims:

This listing of claims replaces all prior versions and listings of claims in the application.

1. (Cancelled).

2. (Currently Amended): An aluminum alloy-and-resin composition composite comprising:

a shaped aluminum alloy material having a surface with a surface roughness of 1 μm to 10 μm and having fine recesses or projections of 0.01 μm to 0.1 μm in diameter on said surface, observing a photograph photographed by using a scanning electron microscope (SEM), said surface being covered with a + trivalent aluminum compound ~~having an average thickness of about 0.001 μm~~ ; and

a thermoplastic resin composition ~~fixed to the surface~~ by filing said fine recesses or projections with said thermoplastic resin composition of said shaped aluminum alloy material by entering said recesses or engaging said projections, said thermoplastic resin composition containing as a main component a polybutylene terephthalate resin or polyphenylene sulfide having an average coefficient of lengthwise and crosswise linear expansion of 2 to 4 $\times 10^{-5}\text{C}^{-1}$.

3. (Currently Amended): An aluminum alloy-and-resin composition composite according to claim ~~[[1]]~~ 2, wherein said recesses or projections include first recesses or first projections

having a first diameter of 0.03 μm to 0.1 μm and a depth about equal to or larger than said first diameter, wherein the number of first recesses or first projections per 1 μm square area of said surface is not less than 10, and said recesses or projections further include second recesses or second projections having a second diameter of 0.01 μm to 0.03 μm and a depth about equal to or larger than said second diameter, wherein the number of second recesses or second projections per 1 μm square area of said surface is not less than 50.

4. (Cancelled)

5. (Currently Amended): An aluminum alloy-and-resin composition composite according to claim ~~[[1]]~~ 2, wherein said thermoplastic resin composition is fixed to the surface of said shaped aluminum alloy material by inserting said shaped aluminum alloy material into an injection mold and injecting said thermoplastic resin composition into said injection mold.

6. (Withdrawn): A production method for the aluminum alloy-and-resin composition composite according to claim 1, said production method comprising the steps of:

producing a coated shaped aluminum alloy material having a thin polyalkylene terephthalate film or polyphenylene sulfide adhering to a surface thereof from said shaped aluminum alloy material and an organic solvent solution of a polyalkylene terephthalate resin or polyphenylene sulfide;

inserting said coated shaped aluminum alloy material into an injection mold; and

injecting said polyalkylene terephthalate resin or polyphenylene sulfide into said injection mold.

7. (Cancelled)

8. (Withdrawn): A production method for the aluminum alloy-and-resin composition composite according to claim 1, said production method comprising the steps of:

heating said shaped aluminum alloy material to not lower than 200°C; and

melting said polyalkylene terephthalate resin or polyphenylene sulfide and bringing it into contact with said shaped aluminum alloy material under pressure.

9. (Withdrawn): A production method for the aluminum alloy-and-resin composition composite according to claim 1, said production method comprising the steps of:

dipping said shaped aluminum alloy material in an aqueous solution of at least one selected from the group consisting of hydrazine, ammonia, and an amine compound;

inserting said dipped shaped aluminum alloy material into an injection mold; and

injecting said polyalkylene terephthalate resin or polyphenylene sulfide into said injection mold.

10. (Previously Presented): An aluminum alloy-and-resin composition composite according to claim 2, wherein said recesses or projections include first recesses or first

projections having a first diameter of 0.03 μm to 0.1 μm and a depth about equal to or larger than said first diameter, wherein the number of first recesses or first projections per 1 μm square area of said surface is not less than 10, and said recesses or projections further include second recesses or second projections having a second diameter of 0.01 μm to 0.03 μm and a depth about equal to or larger than said second diameter, wherein the number of second recesses or second projections per 1 μm square area of said surface is not less than 50.

11. (Previously Presented): An aluminum alloy-and-resin composition composite according to claim 2, wherein said thermoplastic resin composition is fixed to the surface of said shaped aluminum alloy material by inserting said shaped aluminum alloy material into an injection mold and injecting said thermoplastic resin composition into said injection mold.

12. (Previously Presented): An aluminum alloy-and-resin composition composite according to claim 3, wherein said thermoplastic resin composition is fixed to the surface of said shaped aluminum alloy material by inserting said shaped aluminum alloy material into an injection mold and injecting said thermoplastic resin composition into said injection mold.

13. (Withdrawn): A production method for the aluminum alloy-and-resin composition composite according to claim 2, said production method comprising the steps of:

producing a coated shaped aluminum alloy material having a thin polyalkylene terephthalate film or polyphenylene sulfide adhering to a surface thereof from said shaped

aluminum alloy material and an organic solvent solution of a polyalkylene terephthalate resin or polyphenylene sulfide;

inserting said coated shaped aluminum alloy material into an injection mold; and
injecting said polyalkylene terephthalate resin or polyphenylene sulfide into said injection mold.

14. (Withdrawn): A production method for the aluminum alloy-and-resin composition composite according to claim 3, said production method comprising the steps of:

producing a coated shaped aluminum alloy material having a thin polyalkylene terephthalate film or polyphenylene sulfide adhering to a surface thereof from said shaped aluminum alloy material and an organic solvent solution of a polyalkylene terephthalate resin or polyphenylene sulfide;

inserting said coated shaped aluminum alloy material into an injection mold; and
injecting said polyalkylene terephthalate resin or polyphenylene sulfide into said injection mold.

15. (Withdrawn): A production method for the aluminum alloy-and-resin composition composite according to claim 2, said production method comprising the steps of:

heating said shaped aluminum alloy material to not lower than 200°C; and
melting said polyalkylene terephthalate resin or polyphenylene sulfide and bringing it into contact with said shaped aluminum alloy material under pressure.

16. (Withdrawn): A production method for the aluminum alloy-and-resin composition composite according to claim 3, said production method comprising the steps of:

heating said shaped aluminum alloy material to not lower than 200°C; and

melting said polyalkylene terephthalate resin or polyphenylene sulfide and bringing it into contact with said shaped aluminum alloy material under pressure.

17. (Withdrawn): A production method for the aluminum alloy-and-resin composition composite according to claim 2, said production method comprising the steps of:

dipping said shaped aluminum alloy material in an aqueous solution of at least one selected from the group consisting of hydrazine, ammonia, and an amine compound;

inserting said dipped shaped aluminum alloy material into an injection mold; and

injecting said polyalkylene terephthalate resin or polyphenylene sulfide into said injection mold.

18. (Withdrawn): A production method for the aluminum alloy-and-resin composition composite according to claim 3, said production method comprising the steps of:

dipping said shaped aluminum alloy material in an aqueous solution of at least one selected from the group consisting of hydrazine, ammonia, and an amine compound;

inserting said dipped shaped aluminum alloy material into an injection mold; and

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Art Unit: 1794

Amendment under 37 C.F.R §1.111
Attorney Docket No.: 052528

injecting said polyalkylene terephthalate resin or polyphenylene sulfide into said injection mold.